

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference INE-0060 PCT	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/US02/33747	International filing date (<i>day/month/year</i>) 22 October 2002 (22.10.2002)	(Earliest) Priority Date (<i>day/month/year</i>) 22 October 2001 (22.10.2001)
Applicant INTERVENTIONAL THERAPIES		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the Report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (See Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/33747

Box III TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)

NEW ABSTRACT

A wound suturing device is provided comprising a housing (120) and an elongated shaft (16) connected thereto and at least one needle (26, 28) within the shaft, the at least one needle configured to travel distally across a tissue engaging gap within a tissue engaging section (14) positioned distally from the housing on said shaft, wherein the tissue receiving gap has two opposing surfaces into which one side of a wound can be received, wherein the gap is shaped to have a depth to facilitate the placement of the edge of a wound therein such that at least one surface comprises a stop surface, wherein the stop surface is squared at a middle portion thereof to provide good tactile feel to the surgeon when tissue is engaged.

A trigger mechanism for actuation of at least one needle is also provided, the trigger mechanism configured to prevent incomplete needle actuation, the trigger mechanism comprising a housing and a trigger (40) configured to move relative to said housing, at least one track means positioned on one of the trigger and the housing, the at least one track means including a first end portion and a second end portion and a plurality of ratchet teeth between the first and second end positions, and a pin means (130) slideable within the track means as the trigger is actuated, wherein each of the ratchet teeth prevent movement of said trigger in a second direction as the ratchet teeth engage the pin means.

An automatic needle selector mechanism (80) is also provided, configured relative to and including a needle trigger mechanism, the automatic needle selector mechanism comprising a trigger mechanism movable relative to a housing, the trigger mechanism engageable with a selector arm such that the engaged selector arm is in a first position prior to actuation of the trigger mechanism, and wherein the engaged selector arm is in a second position subsequent to actuation of the trigger mechanism.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/33747

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 17/04, 06, 10

US CL : 606/144, 139

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 606/144, 139

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST database

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,792,153 A (SWAIN) 11 August 1998 (11.08.1999), Figs. 1-9; col. 1, lines 15-27, lines 50-67; cols. 2-4.	1-8
X	US 5,797,927 A (YOON) 25 August 1998 (25.08.1998), Figs. 15 and 16; col. 11, lines 52-67; col. 12, col. 13, lines 1-56.	9-16
X	US 5,725,536 A (OBERLIN) 10 March 1998 (10.03.1998); Figs. 34-42; col. 20, lines 49-67; cols. 21-25; col. 26, lines 1-37.	9-16

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"B" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

03 February 2003 (03.02.2003)

Name and mailing address of the ISA/US

Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No.

Date of mailing of the international search report

07 MAR 2003

Authorized officer

Michael Milano

Telephone No. 703-308-0858